



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/086,749	02/28/2002	William A. Montague	0252/US	8762

7590 05/15/2003

FRANCIS J. CAUFIELD
6 APOLLO CIRCLE
LEXINGTON, MA 02421-7025

[REDACTED] EXAMINER

VORTMAN, ANATOLY

ART UNIT	PAPER NUMBER
	2835

DATE MAILED: 05/15/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	10/086,749	MONTAGUE, WILLIAM A.
	Examiner	Art Unit
	Anatoly Vortman	2835

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 28 February 2002.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 33 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) 31 is/are allowed.
- 6) Claim(s) 1-10,23,27-30,32 and 33 is/are rejected.
- 7) Claim(s) 11-22 and 24-26 is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

- 11) The proposed drawing correction filed on _____ is: a) approved b) disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) The translation of the foreign language provisional application has been received.
- 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2 . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 2, 5, 8, and 10, are rejected under 35 U.S.C. 102(b) as being clearly anticipated by US/4,484,185 to Graves.

Regarding claim 1, Graves disclosed (Fig. 1, 2 and 10) an identical electrical safety connector fuse (10) as claimed in claim 1, including a sealed housing (12), live and neutral apertures (28, 30) for receiving prongs of a plug, live and neutral prongs (16, 14) for engaging live and neutral receptacles of an electrical socket, a fuse (124) connected to said live prong (16), a live receptacle (24) connected to said fuse (124), and a neutral receptacle (22) electrically connected to said neutral prong (14).

Regarding claim 2, Graves disclosed a ground aperture, a ground prong extending outwardly from said housing (12) and a ground receptacle positioned in said housing (12) (between receptacles (22, 24)) adjacent said ground aperture, (Fig. 10).

Regarding claim 5, Graves disclosed means (70, 72) for releasably securing said connector fuse (10) to the electrical socket (62, 64), (Fig. 1, 6).

Regarding claims 8 and 10, Graves disclosed a light emitting means (light emitting diode (35a)) electrically connected to said live and neutral receptacles (22, 24) and positioned adjacent a light-transmissive portion (46a) of the housing (12), (Fig. 10).

3. Claim 30 is rejected under 35 U.S.C. 102(b) as being clearly anticipated by US/2,226,148 to Taylor.

Taylor disclosed a precisely identical electrical plug as claimed in claim 30, including prongs (12) having outward surfaces with portions formed from an electrically insulating material (13).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 3 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Graves in view of GB/2,373,377 to Blair et al., (Blair).

Regarding claims 3 and 4, Graves disclosed all of the claims limitations as apply to claim 1 above, but did not disclose Braille markings on the connector housing.

Blair disclosed an electrical connector (i.e. plug) (Fig. 1) having Braille markings (2) for identification purposes.

Since inventions of Graves and of Blair are from the same field of endeavor (electrical connectors (i.e. plugs)) the purpose of the Braille markings taught by Blair would be recognized in the invention of Graves.

It would have been obvious to a person of ordinary skill in the fuse or connector arts at the time the invention was made to provide Braille markings as taught by Blair on the connector housing of Graves for identification purposes.

6. Claims 6 and 7, are rejected under 35 U.S.C. 103(a) as being unpatentable over Graves in view of US/4,071,872 to Phillips, Jr., (Phillips).

Graves disclosed all of the claims limitations as apply to claim 5 above, but did not disclose a flange with an aperture adapted to replace a faceplate of the electrical socket.

Phillips disclosed (Fig. 1 and 2) a connector (22) having a connector housing (30, 44) comprising a flange (28) extending laterally from said housing and having at least one aperture (62) extending therethrough such that a fastener (a screw) can be inserted through said aperture (62) to secure said connector to the socket.

Since inventions of Graves and of Phillips are from the same field of endeavor (electrical connectors (i.e. plugs)) the purpose of the flange with the aperture formed therethrough disclosed by Phillips would be recognized in the invention of Graves.

It would have been obvious to a person of ordinary skill in the fuse or connector arts at the time the invention was made to provide said housing of Graves with a flange having an aperture formed therethrough as taught by Phillips in order to secure said connector of Graves to

the face plate of the socket, thus preventing accidental separation of said connector from the socket.

The functional limitation of claim 7, that "said flange is adapted to replace the face plate" while being considered has not been given patentable weight, because it is narrative in form. In order to be given patentable weight, a functional recitation must be expressed as a "means" for performing the specified function, as set forth in 35 USC § 112, 6th paragraph, and must be supported by recitation in the claim of sufficient structure to warrant the presence of the functional language. *In re Fuller*, 1929 C.D. 172; 388 O.G. 279. Also, it has been held that the recitation that an element is "adapted to" perform a function is not a positive limitation but only requires the ability to so perform. It does not constitute a limitation in any patentable sense. *In re Hutchison*, 69 USPQ 138.

7. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Graves in view of US/3,539, 961 to Worthington.

Regarding claim 9, Graves disclosed all the limitations as apply to claim 8, but did not disclose a resistor connected in series with the light emitting means.

Worthington disclosed an electrical connector (Fig. 4 and 5) having a light emitting means (30) and a resistor (80) connected in series with said light emitting means (30) so as to prevent shunting of the load current to said light emitting means (column 3, lines 35+).

Since inventions of Graves and of Worthington are from the same field of endeavor (electrical connectors (i.e. plugs)), the purpose of the resistor disclosed by Worthington would be recognized in the invention of Graves.

It would have been obvious to a person of ordinary skill in the fuse or connector arts at the time the invention was made to provide a resistor connected in series with the light emitting means of Graves as taught by Worthington in order to prevent shunting of the load current to the light emitting means of Graves.

8. Claims 23, 27-29, and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Graves in view of US/2,226,148 to Taylor.

Regarding claim 32, Graves disclosed (Fig. 1, 2 and 10) an identical electrical safety connector fuse (10) as claimed in claim 32, including a sealed housing (12), live and neutral apertures (28, 30) for receiving prongs of a plug, live and neutral prongs (16, 14) for engaging live and neutral receptacles of an electrical socket, a fuse (124) connected to said live prong (16), a live receptacle (24) connected to said fuse (124), and a neutral receptacle (22) electrically connected to said neutral prong (14), but did not disclose that said live and neutral prongs have root sections of outward surfaces substantially formed from insulating material and tip portions formed from an electrically conducting material.

Regarding claims 23 and 27-29, Graves disclosed all of the claims limitations as apply to claim 1, but did not disclose that said live and neutral prongs have root sections of outward surfaces substantially formed from insulating material and tip portions formed from an electrically conducting material.

Taylor disclosed (Fig. 1) a connector (2) having neutral and live prongs (12) comprising root sections of outward surfaces substantially formed from insulating material (13) so as to

prevent short circuit across partially withdrawn (from socket) prongs (column 2, lines 45+) and tip portions (12') formed from an electrically conducting material.

Since inventions of Graves and of Taylor are from the same field of endeavor (electrical connectors (i.e. plugs)), the purpose of partially insulated prongs disclosed by Taylor would be recognized in the invention of Graves.

It would have been obvious to a person of ordinary skill in the fuse or connector arts at the time the invention was made to provide prongs of Graves with the insulated root sections as taught by Taylor in order to prevent short circuit across partially withdrawn (from socket) prongs, thus enhancing safety of the device.

9. Claim 33 is rejected under 35 U.S.C. 103(a) as being unpatentable over Graves in view of Taylor and further in view of US/4,632,479 to Jacobson.

Regarding claim 33, Graves disclosed (Fig. 1, 2 and 10) an identical electrical safety connector fuse (10) as claimed in claim 33, including a sealed housing (12), live and neutral apertures (28, 30) for receiving prongs of a plug, live and neutral prongs (16, 14) for engaging live and neutral receptacles of an electrical socket, a fuse (124) connected to said live prong (16), a live receptacle (24) connected to said fuse (124), and a neutral receptacle (22) electrically connected to said neutral prong (14), but did not disclose that said live and neutral prongs have root sections of outward surfaces substantially formed from insulating material and tip portions formed from an electrically conducting material and that a blocking member is disposed within the housing so as to block said neutral and live apertures.

Taylor disclosed (Fig. 1) a connector (2) having neutral and live prongs (12) comprising root sections of outward surfaces substantially formed from insulating material (13) so as to prevent short circuit across partially withdrawn (from socket) prongs (column 2, lines 45+) and tip portions (12') formed from an electrically conducting material.

Since inventions of Graves and of Taylor are from the same field of endeavor (electrical connectors (i.e. plugs)), the purpose of the partially insulated prongs disclosed by Taylor would be recognized in the invention of Graves.

It would have been obvious to a person of ordinary skill in the fuse or connector arts at the time the invention was made to provide prongs of Graves with insulated root sections as taught by Taylor in order to prevent short circuit across partially withdrawn (from socket) prongs, thus enhancing the safety of the device.

Further, Jacobson disclosed (Fig. 1) an electrical receptacle (10) having apertures (18, 20) for accepting prongs of a plug (24), wherein said receptacle comprising blocking members (26, 28) disposed in a housing of said receptacle (10) so as to block said apertures (18, 20) in order to prevent tampering and insertion of the metal objects into the apertures of the receptacle (column 4, lines 66+, column 5, lines 1+).

Since inventions of Jacobson, Graves and of Taylor are from the same field of endeavor (electrical connectors (i.e. plugs)), the purpose of the blocking members disclosed by Jacobson would be recognized in combination of Graves and Taylor.

It would have been obvious to a person of ordinary skill in the fuse or connector arts at the time the invention was made to modify the aforementioned combination of Graves and of

Taylor by providing it with blocking members as taught by Jacobson in order to enhance the safety of the device.

Allowable Subject Matter

10. Claim 31 is allowed.

11. Claims 11-22 and 24-26 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

12. The following is a statement of reasons for the indication of allowable subject matter:

regarding claim 11, the claim recites “the whole of said housing is light-transmissive”;

regarding claims 12-20 and 31, claims 12 and 31 recite “said blocking member also having a cam surface...to be engaged by said neutral prong”;

regarding claims 21 and 22, claim 21 recites “said neutral prong extends a greater distance from said housing than said live prong”;

regarding claims 24-26, claim 24 recites “a tip portion...is formed from said insulating material”.

The aforementioned limitations **in combination** with remaining limitations of claims 11, 12, 21, 24, and 31, are believed to render said claims 11, 12, 21, 24, and 31 and, consequently all of the dependent claims patentable over the art of record.

Conclusion

13. The prior art made of record and not relied upon is considered pertinent to Applicant's disclosure:

US/5004435, 3775727, 3938068, 2597600, 4861827, 4547827, 5590010, 5451173, 5383799, 4111516, 4934962, and 4275374 disclosed plugable adapters with circuit protection means.

US/5641311, 3513435, 3710287, 5897398, and 6109977 disclosed electrical plugs with partially insulated prongs.

US/4897049 disclosed plugable adapter with blocking member.

GB/2356621 and GB/2220188 disclosed electrical plugs with Braille markings.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anatoly Vortman whose telephone number is 703-308-7824. The examiner can normally be reached on 9:30-6:00, Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Darren Schuberg can be reached on 703-308-4815. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-3431 for regular communications and 703-305-3432 for After Final communications.

Art Unit: 2835

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1782.

Anatoly Vortman
Primary Examiner
Art Unit 2835

A.V.
March 10, 2003

A handwritten signature in black ink, appearing to read "A. Vortman".